



# A STUDY ON AWARENESS LEVEL OF DIABETIC PATIENTS

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## Abstract:

There is a significant health burden due to the rising incidence of diabetes mellitus and its related health problems. Preventing and controlling this disease will mostly depend on raising awareness of it. Additionally, poor glycemic control brought on by noncompliance with the management increases the risk of dangerous consequences. The current study was carried out to gauge medication adherence and gauge patients with Type 2 diabetes's awareness of diabetes from a variety of perspectives. In this research, we use a pie diagram to explain the age distribution of respondents based on their knowledge of their diabetes and symptoms.

**Keywords:** Distribution, diabetics and Pie diagram.

## I. Introduction

In the modern life style people's habits quite changing. It includes their choice in entertainment, social movement, food habits etc. Genetic factors, environmental changes and life style of the people which cause major health disorders and diseases. A prominent disease among them is diabetes mellitus. Diabetes is a disease in which pancreas produces little or no insulin. Insulin is the hormone, a source of energy, which helps tissues of the body to absorb glucose. When the glucose level in the blood is above normal a person is identified as a diabetic patient. People with diabetes have complications in converting food into energy. After a meal, food is broken down into sugar called glucose, which is carried by the blood to cells throughout the body. Cells use insulin to help them convert blood glucose into energy. The international Diabetes Federation estimates that the number of diabetic patients in India have almost doubled from 19 million in 1995 to 40.9 million in 2007. It is estimated to increase to 69.9 million by 2025. Currently, up to 11% of India's urban population and 3% of the rural population above the ages of 15 have diabetes. The World Health Organization estimates that mortality from diabetes and their heart disease cost India about \$210 billion every year and it is expected to increase to \$335 billion in the next ten years.

## II. Basic Definition of diabetes

**Definition:** Diabetes is the condition in which the body does not properly process food for use as energy. Most of the food we eat is turned into glucose, or sugar, for our bodies to use for energy. The pancreas, an organ that lies near the stomach, makes a hormone called insulin to help glucose get into the cells of our bodies. When you have diabetes, your body either doesn't make enough insulin or can't use its own insulin as well as it should. This causes sugars to build up in your blood. This is why many people refer to diabetes as "sugar".

**Definition:** Type 1 diabetes, previously called insulin dependent diabetes mellitus (IDDM) or juvenile onset diabetes, may account for 5 percent to 10 percent of all diagnosed cases of diabetes. Risk factors are less well defined for Type I diabetes than for Type 2 diabetes, but autoimmune, genetic, and environmental factors are involved in the development of this type of diabetes.

**Definition:** Type 2 diabetes was previously called non-insulin dependent diabetes mellitus (NIDDM) or adult-onset diabetes. Type 2 diabetes may account for about 90 percent to 95 percent of all diagnosed cases of diabetes. Risk factors for Type 2 diabetes include older age, obesity, and family history of diabetes, prior history of gestational diabetes, impaired glucose tolerance, physical inactivity, and race/ethnicity. African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Pacific Islanders are at particularly high risk for type 2 diabetes.

## III. Research Methodology:

The data collected is the primary data. For collecting the data a questionnaire was framed after discussing with the diabetic specialists. A sample of 100 respondents were targeted and collected. The questionnaire covers the questions relating to the personal traits of the respondent and their level of awareness about the diabetes.

After collecting the data proper care was taken in classifying the data under suitable heads. The following tools were used in analyzing the collected data.

Descriptive and percentage analysis was used to describe the proportion of respondents belonging to a particular category.

**Bar Diagram:** A diagram made of bars whose height represents the frequencies of respective categories is called a bar diagram.

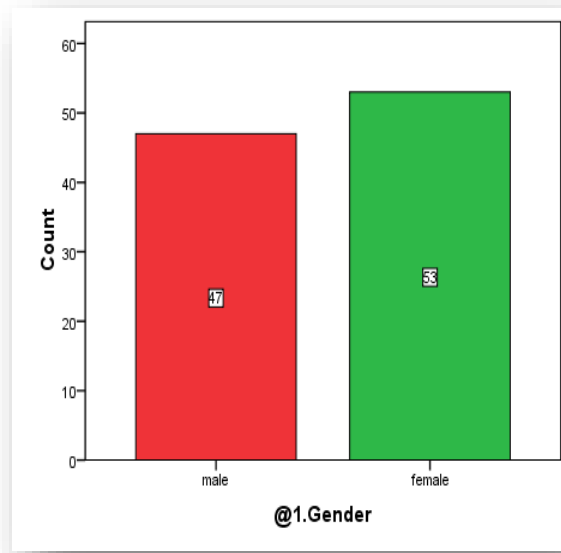
**Pie Diagram:** A pie diagram is more commonly used to display percentages, although it can be used to display frequencies. A circle is divided into portions that represent the relative frequencies or percentages of a population or a sample belonging to different categories is called a pie diagram.

## IV. Statistical analysis and interpretation

### 4.1 Gender wise distribution

Gender wise classification was discussed in table which is given below

| Gender       | Respondents |
|--------------|-------------|
| Male         | 52          |
| Female       | 48          |
| <b>Total</b> | <b>100</b>  |

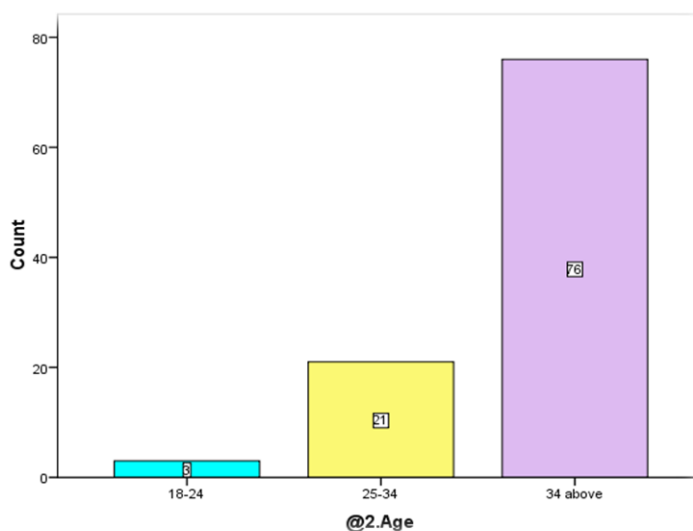
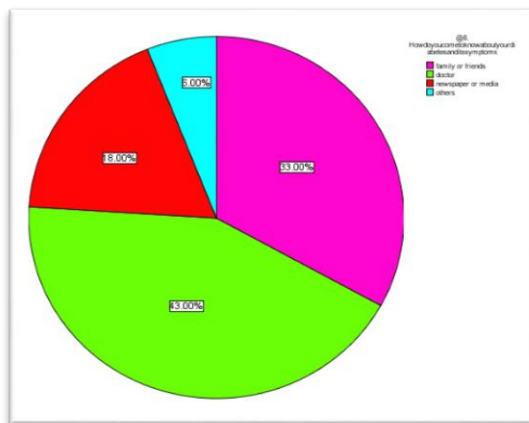


The above table shows that out of 100 respondents, 47% of the respondents are male diabetic patients and the remaining 53% of the respondents are female diabetic patients.

### 4.2 Age wise distribution

The age wise distribution of the respondents are given in the following table as follows

| Age          | Frequency  |
|--------------|------------|
| Less than 18 | 0          |
| 18-24        | 3          |
| 25-34        | 21         |
| 34 above     | 76         |
| <b>Total</b> | <b>100</b> |



From the table it is observed that among the respondents 76% of the people belonging to above 34 years of age group, 21% of the people belonging to 25-34 years of age group, 3% of the people belonging to 18-24 years of age group.

### 4.3 Distribution of respondents by know about their diabetics and symptoms

| Know About         | Frequency  |
|--------------------|------------|
| Family or Friends  | 33         |
| Doctor             | 43         |
| Newspaper or media | 18         |
| Others             | 5          |
| <b>Total</b>       | <b>100</b> |

From the diagram, it is noticed that among the respondents 43% of the people getting knowledge on diabetes and its symptoms by Doctors, 33% of the people aware from the family or friends, 18% of the people gathering information from the newspaper or media, and others 5% of the respondents from other sources.

## V. Conclusion:

The goal of this paper is to give a general idea of the current status of diabetes research. Above age of 35 people's mostly affected by diabetic. Most of the people having blood pressure due to diabetic period. Diabetes is a slow killer with no known curable treatments. Diabetic is the fourth leading cause of death. However, its complications can be reduced through proper awareness and timely treatment. Three major complications are related to blindness, kidney damage and heart attack. It is important to keep the blood glucose levels of patients under strict control for avoiding the complications.

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